Refine Search

Search Results -

Terms	Documents
L4 and L14	1

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L15

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Saturday, April 09, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
L15	l4 and L14	1	L15
L14	l10 and l11 and l12 and L13	10	L14
L13	monitoring adj1 station	6096	L13
L12	radio adj transmitter	23498	L12
L11	ins	7690391	L11
L10	navigation adj system	34279	L10
L9	l7 and L8	12	L9
L8	wireless$2	247598	L8
L7	l5 and L6	59	L7
L6	center or station	3408299	L6
L5	l3 same L4	70	L5
L4	position adj vector	4313	L4
L3	l1 same L2	393069	L3
L2	vehicle	1877000	L2

L1	ins or (inertial adj1 navigation)	7691155	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L8 and L19	26

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L20

Refine Search

Recall Text Clear Interrupt

Search History

DATE: Saturday, April 09, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L20	l8 and L19	26	L20
L19	l12 and L18	100	L19
L18	l10 and L16	3582	L18
L17	l14 and L16	2	L17
L16	inertial	54378	L16
L15	l4 and L14	1	L15
L14	l10 and l11 and l12 and L13	10	L14
L13	monitoring adj1 station	6096	L13
L12	radio adj transmitter	23498	L12
L11	ins	7690391	L11
L10	navigation adj system	34279	L10
L9	l7 and L8	12	L9
L8	wireless$2	247598	L8
L7	l5 and L6	59	L7

L6	center or station	3408299	L6
L5	l3 same L4	70	L5
L4	position adj vector	4313	L4
L3	l1 same L2	393069	L3
L2	vehicle	1877000	L2
L1	ins or (inertial adj1 navigation)	7691155	L1

END OF SEARCH HISTORY

Refine Search

Search Results -

Terms	Documents
L7 and L8	12

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L9

Refine Search

Recall Text Clear Interrupt

Search History

DATE: Saturday, April 09, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L9	17 and L8	12	L9
L8	wireless$2	247598	L8
L7	15 and L6	59	L7
L6	center or station	3408299	L6
L5	13 same L4	70	L5
L4	position adj vector	4313	L4
L3	11 same L2	393069	L3
L2	vehicle	1877000	L2
L1	ins or (inertial adj1 navigation)	7691155	L1

END OF SEARCH HISTORY

Radiogoniometer

n. radio direction-finding apparatus. **rodiogoniometry**, *n.*

L24: Entry 8 of 8 File: USPT Apr 21, 1998

DOCUMENT-IDENTIFIER: US 5742509 A
TITLE: Personal tracking system integrated with base station

Brief Summary Text (10):
In U.S Pat. No. 5,270,937 Link and Spencer disclose a vehicle map position determining apparatus. The apparatus includes a map memory means which stores map data defining fixed road segments that exist in an overall geographical area, a determining means for accessing the map data, a means for receiving vehicle position data, and a utilization means coupled to the receiving means and the determining means for utilizing the vehicle position data and the map data in the map memory means which defines the road segments. The determining means includes means for receiving data defining start and end coordinates of each of said road segments, means for defining subregion in terms of boundary coordinates, means for comparing start and end road segments coordinates with the boundary coordinates, and logical means for identifying any of said road segments as having at least a portion inside the subregion.

Brief Summary Text (11):
Noreen and Harper in U.S. Pat. No. 5,303,393 disclose an integrated radio satellite response system and method permitting the integration of analog or digital audio broadcast services with personal communications services and navigation services into low-cost mobile radios. The system has an ability, from a mobile terminal, to signal an emergency condition or to order products or services offered in advertisements. The radio response system includes a broadcast station, a satellite relay, a processing center, and a plurality of user terminals. Each user terminal has a broadcast receiver, a communications interface device, a controller, and a data transmitter. The broadcast station broadcasts a program signal. The communications interface device communicates the program signal to a user. The controller generates a user-data signal from identification information transmitted in connection with the program signal. The data transmitter transmits the user-data signal at a carrier frequency as a transmitted-data signal. The satellite relays the user-data signal to the processing center.

Brief Summary Text (12):
In U.S. Pat. No. 5,334,974, Simms et al disclose a personal security system which quickly and accurately provides a central dispatch operator with emergency information displayed on digitized electronic map in a format which allows efficient dispatching of emergency assistance to a mobile person. The system comprises the mobile unit including a memory, a keyboard, a LORAN-C receiver for providing position information, a processor, and a cellular phone; and a central dispatch station comprising a communication circuit for receiving a digital code from the mobile unit, a programmable memory containing identification information relating to a mobile unit, and a video display.

Brief Summary Text (14):
At first, the base station employing BSS should be able to communicate with the watson device when called by the watson device or when commanded to call the watson device to request the ID of watson to make the positive identification, and to

receive the location of the watson device at certain sending times. Secondly, the base station should be able to display the location of watson on the electronic map. Lastly, the base station should be able to change the configuration of the watson device which includes timing and other requirements for watson to call the base station.

Brief Summary Text (18):
In one preferred embodiment, the location determination means can include a Global Positioning System (GPS) Receiver, or a Global Orbiting Navigational Satellite System (GLONASS) Receiver. In another preferred embodiment, the location determination means can include an inertial navigation system, a gyroscope system, or a local magnetic field sensor system. Yet, in one more embodiment, the location determination means includes a Loran, Tacan, Decca, Omega, JTIDS Relnav, PLRS, or VOR/DME Receiver.

Brief Summary Text (20):
In one embodiment, the communication means includes a Low Earth Orbiting Satellites (LEOS) used to store and to forward digital packet data. The communication means can also include a cellular telephone communication means, a paging signal receiving means, a wireless massaging services, a wireless application services, a wireless WAN/LAN station, or an Earth-satellite-Earth communication module that uses at least one satellite to relay a radiowave signal. The cellular telephone communication means can include an Advanced Mobile Phone System (AMPS) including a modem, wherein the modem can comprise a DSP (digital signal processor) modem, or a cellular digital packet data (CDPD) modem. The cellular digital communication means further includes a means of modulation of digital data over a radiolink using a time division multiple access (TDMA) system, or a code division multiple access (CDMA) system.

Drawing Description Text (3):
FIG. 2 depicts a personal tracking system using a cellular phone for wireless link between a watson device and a base station.

Detailed Description Text (3):
In one embodiment, the position determination means can include a satellite positioning system (SATPS) receiver, such as a global positioning system (GPS) receiver, or a Global Orbiting Navigational Satellite System (GLONASS) Receiver. Yet, in another embodiment, the position determination means can include an inertial navigation system, a gyroscope system, or a local magnetic field sensor system. Yet, in one more embodiment, the location determination means includes a Loran, Tacan, Decca, Omega, JTIDS Relnav, PLRS, or VOR/DME Receiver.

Detailed Description Text (6):
The GPS is part of a satellite-based navigation system developed by the United States Defense Department under its NAVSTAR satellite program. A fully operational GPS includes up to 24 Earth satellites approximately uniformly dispersed around six circular orbits with four satellites each, the orbits being inclined at an angle of 55.degree. relative to the equator and being separated from each other by multiples of 60.degree. longitude. The orbits have radii of 26,560 kilometers and are approximately circular. The orbits are non-geosynchronous, with 0.5 sidereal day (11.967 hours) orbital time intervals, so that the satellites move with time relative to the Earth below. Theoretically, three or more GPS satellites will be visible from most points on the Earth's surface, and visual access to three or more such satellites can be used to determine an observer's position anywhere on the Earth's surface, 24 hours per day. Each satellite carries a cesium or rubidium atomic clock to provide timing information for the signals transmitted by the satellites. Internal clock correction is provided for each satellite clock.

Detailed Description Text (12):
Reference to a Satellite Positioning System or SATPS herein refers to a Global

Positioning System, to a Global Orbiting Navigation System, and to any other compatible satellite-based system that provides information by which an observer's position and the time of observation can be determined, all of which meet the requirements of the present invention.

Detailed Description Text (13):
A Satellite Positioning System (SATPS), such as the Global Positioning System (GPS) or the Global Orbiting Navigation Satellite System (GLONASS), uses transmission of coded radio signals, with the structure described above, from a plurality of Earth-orbiting satellites. An SATPS antenna receives SATPS signals from a plurality (preferably four or more) of SATPS satellites and passes these signals to an SATPS signal receiver/processor, which (1) identifies the SATPS satellite source for each SATPS signal, (2) determines the time at which each identified SATPS signal arrives at the antenna, and (3) determines the present location of the SATPS satellites.

Detailed Description Text (21):
After the SATPS receiver determines the coordinates of the i-th SATPS satellite by picking up transmitted ephemeries constants, the SATPS receiver can obtain the solution of the set of the four equations for its unknown coordinates (x0,y0,z0) and for unknown time bias error (cb). The SATPS receiver can also obtain its heading and speed. (See The Navstar Global Positioning System, Tom Logsdon, Van Nostrand Reinhold, 1992, pp. 8-33, 44-75, 128-187.)

Detailed Description Text (22):
After determining its coordinates, speed and heading using the SATPS or GPS receiver, the vehicle 12 with the watson device 42 can communicate this information to the base station 28 using the communication link 27 as shown in FIG. 1.

Detailed Description Text (26):
The communication means can include a cellular telephone communication means, a paging signal receiving means, a wireless messaging services, a wireless application services, a wireless WAN/LAN station, or an Earth-satellite-Earth communication module that uses at least one satellite to relay a radiowave signal.

Detailed Description Text (31):
Two radio channels, forward and reverse, must be allocated to each mobile unit for duplex operation; that is, the user expects to speak and listen at the same time. The forward channel refers to the base-to-mobile path, and the reverse channel refers to the mobile-to-base path. Both the base station and the mobile station require radio transmitter circuits. The mobile station carries its own telephone number in internal memories. The mobile station also contains a radio receiver, as well as a transmitter and tuning (synthesizer) circuits, and a battery.

Detailed Description Text (34):
The watson device 42 (FIG.3) installed in the mobile unit 12 (FIG. 1) includes a GPS sensor-receiver 72 having the antenna 14 which determines the coordinates, speed, and heading of the mobile unit; a system controller 68 which is connected to the GPS receiver and controls the propagation of all signals within the mobile unit, and a communication system including a cell phone-data device 110 for providing an interface with the base station 28 (FIG. 2).

Detailed Description Text (37):
The GPS receiver 72 processes the satellite data and communicates the position, time, speed, and heading of the mobile unit to a controller 68 through a bus 70. A cable 76 is used for interface with an external GPS system for obtaining differential position data. The system controller 68 controls the transmission of the position data according to a programmed set of control instructions supplied to the controller 68 by a non-volatile memory 62 accessible through a bus 63. Initial configuration including determination of the sending times (sending times are times at which watson transmits its position data to the base station) is programmed by a

service computer 64 through a bus 66. As a result, the programmed controller 68 transmits the position data to the cellular phone 110 through busses 86, 88, 90, 92, 94, and 96 at sending times. Accordingly, the cellular phone 110 transmits the position data to the base station 28 (FIG.2) at the same sending times. The initial sending time as well as the frequency of transmission can be programmed also externally by the base station 28 as described below. The alternative determination of sending times may include the transmission of position data by the watson device to the base station at certain times when the roving mobile unit with the installed watson device reaches the boundaries of a certain geographical area designated as an alarm zone. In another embodiment, the determination of sending times may include the transmission of position data by the watson device to the base station at certain distances and at certain times when the roving mobile unit with the installed watson device reaches the certain distances at certain times.

Detailed Description Text (42):
FIG. 5A illustrates the flowchart describing the steps of the tracking process using the watson device installed in the mobile unit and the base station with the BSS to track the location of the mobile unit. The step 132 corresponds to the step of sending the watson telephone number to the base station by the watson device 42 using the cell phone-data unit 110 with the antenna 112 (FIG. 3) to make a positive identification of the mobile unit. The invention is not limited to tracking of the single mobile unit. The base station can track a plurality of mobile units, each of them having an installed watson device with its own watson telephone number, the same way it can track a single mobile unit. It can be done by sequentially communicating with each single watson device, one after another. Therefore, the following discussion is valid for a plurality of mobile units, each of them having an installed watson device.

L20: Entry 26 of 26 File: USPT Apr 21, 1998

DOCUMENT-IDENTIFIER: US 5742509 A
TITLE: Personal tracking system integrated with base station

Brief Summary Text (18):
In one preferred embodiment, the location determination means can include a Global Positioning System (GPS) Receiver, or a Global Orbiting Navigational Satellite System (GLONASS) Receiver. In another preferred embodiment, the location determination means can include an inertial navigation system, a gyroscope system, or a local magnetic field sensor system. Yet, in one more embodiment, the location determination means includes a Loran, Tacan, Decca, Omega, JTIDS Relnav, PLRS, or VOR/DME Receiver.

Brief Summary Text (20):
In one embodiment, the communication means includes a Low Earth Orbiting Satellites (LEOS) used to store and to forward digital packet data. The communication means can also include a cellular telephone communication means, a paging signal receiving means, a wireless massaging services, a wireless application services, a wireless WAN/LAN station, or an Earth-satellite-Earth communication module that uses at least one satellite to relay a radiowave signal. The cellular telephone communication means can include an Advanced Mobile Phone System (AMPS) including a modem, wherein the modem can comprise a DSP (digital signal processor) modem, or a cellular digital packet data (CDPD) modem. The cellular digital communication means further includes a means of modulation of digital data over a radiolink using a time division multiple access (TDMA) system, or a code division multiple access (CDMA) system.

Drawing Description Text (3):
FIG. 2 depicts a personal tracking system using a cellular phone for wireless link between a watson device and a base station.

Detailed Description Text (3):
In one embodiment, the position determination means can include a satellite positioning system (SATPS) receiver, such as a global positioning system (GPS) receiver, or a Global Orbiting Navigational Satellite System (GLONASS) Receiver. Yet, in another embodiment, the position determination means can include an inertial navigation system, a gyroscope system, or a local magnetic field sensor system. Yet, in one more embodiment, the location determination means includes a Loran, Tacan, Decca, Omega, JTIDS Relnav, PLRS, or VOR/DME Receiver.

Detailed Description Text (6):
The GPS is part of a satellite-based navigation system developed by the United States Defense Department under its NAVSTAR satellite program. A fully operational GPS includes up to 24 Earth satellites approximately uniformly dispersed around six circular orbits with four satellites each, the orbits being inclined at an angle of 55.degree. relative to the equator and being separated from each other by multiples of 60.degree. longitude. The orbits have radii of 26,560 kilometers and are approximately circular. The orbits are non-geosynchronous, with 0.5 sidereal day (11.967 hours) orbital time intervals, so that the satellites move with time

relative to the Earth below. Theoretically, three or more GPS satellites will be visible from most points on the Earth's surface, and visual access to three or more such satellites can be used to determine an observer's position anywhere on the Earth's surface, 24 hours per day. Each satellite carries a cesium or rubidium atomic clock to provide timing information for the signals transmitted by the satellites. Internal clock correction is provided for each satellite clock.

Detailed Description Text (12):
Reference to a Satellite Positioning System or SATPS herein refers to a Global Positioning System, to a Global Orbiting Navigation System, and to any other compatible satellite-based system that provides information by which an observer's position and the time of observation can be determined, all of which meet the requirements of the present invention.

Detailed Description Text (26):
The communication means can include a cellular telephone communication means, a paging signal receiving means, a wireless messaging services, a wireless application services, a wireless WAN/LAN station, or an Earth-satellite-Earth communication module that uses at least one satellite to relay a radiowave signal.

Detailed Description Text (31):
Two radio channels, forward and reverse, must be allocated to each mobile unit for duplex operation; that is, the user expects to speak and listen at the same time. The forward channel refers to the base-to-mobile path, and the reverse channel refers to the mobile-to-base path. Both the base station and the mobile station require radio transmitter circuits. The mobile station carries its own telephone number in internal memories. The mobile station also contains a radio receiver, as well as a transmitter and tuning (synthesizer) circuits, and a battery.